



Sanford Consortium for Regenerative Medicine

Grant Award Details

Sanford Consortium for Regenerative Medicine

Grant Type: Major Facilities

Grant Number: FA1-00607

Investigator:

Name: Edward Holmes

Institution: Sanford Consortium for Regenerative

Medicine

Type: PI

Award Value: \$42,827,439

Status: Closed

Grant Application Details

Application Title: Sanford Consortium for Regenerative Medicine

Public Abstract:

The San Diego Consortium for Regenerative Medicine ("SDCRM") is a nonprofit organization formed to marshal the intellectual resources of four world-leaders in life sciences research, including the Burnham Institute for Medical Research, the Salk Institute for Biological Studies, The Scripps Research Institute and the University of California, San Diego. In addition to the collective strength of its members, SDCRM has established an extensive network of academic and industrial collaborators to efficiently and effectively expand the breadth and depth of its scientific, technological capabilities and resources.

The SDCRM research program goals are, consistent with those of the California Institute for Regenerative Medicine ("CIRM"), to invent research tools and technologies to hasten the pace of stem cell research progress and to discover and develop diagnostics, therapies and cures to relieve human suffering from chronic disease and injury.

The research interests of SDCRM member scientists are extraordinarily broad and deep and exceed what SDCRM can pursue in its initial resident basic research, preclinical research and preclinical development programs. That notwithstanding, resident and non-resident program will remain closely integrated by virtue of the strong scientific community and its demonstrably successful traditions of integrative collaboration.

SDCRM's basic research program is targeted to understand the fundamental biology of stem cells and pluripotency and consists of five research areas: Stem Cell Growth and Differentiation, Neuroscience, Cardiovascular Biology, Hematopoiesis, and Vision Science.

SDCRM's preclinical research program builds on the outcomes of its basic research program and includes investigations directed to the development of diagnostics and therapies. Preclinical research falls into seven major areas: Neurology, Cardiology, Hematology/Oncology, Endocrinology, Ophthalmology, Nephrology and Technology Development.

The focus of the SDCRM preclinical development program is to move stem cell-based diagnostics and therapies into the clinic. SDCRM's preclinical development and clinical research program emphasizes six major areas: Neurology, Cardiology, Hematology/Oncology, Endocrinology, Ophthalmology, and Technology Development.

In addition SDCRM will launch a comprehensive outreach program intended to not only train the next generation of collaborative, multi-disciplinary scientists but also to engage the community in a dialogue about the ethics of research and endeavor to inform and educate the public about our scientific and medical progress and aspirations.

By building only one new facility, by sharing space and expensive technologies and resources SDCRM represents an effective and efficient use of Proposition 71 funds and creates a synergistic research enterprise and community and statewide resource the whole of which is substantially greater than the sum of its parts.

Statement of Benefit to California:

The premise of stem cell research is that we can harness the regenerative power of stem cells to understand, treat and cure degenerative diseases and injuries. The promise is that stem cells could offer the possibility of a renewable source of replacement cells and tissues to treat diseases including Parkinson's and Alzheimer's diseases, spinal cord injury, stroke, burns, heart disease, diabetes, osteoarthritis, and rheumatoid arthritis and that a better understanding of stem cells could help us to understand how diseases such as cancer and Alzheimer's disease or how birth defects arise and suggest new strategies for therapy.

The San Diego Consortium for Regenerative Medicine ("SDCRM") is a nonprofit organization formed by and comprising the Burnham Institute for Medical Research, the Salk Institute for Biological Studies, The Scripps Research Institute and the University of California, San Diego.

Investment in an SDCRM facility represents an exceptional, worthy investment by the California Institute for Regenerative Medicine. The SDCRM facility will provide 'safe-harbor' laboratories, free from Federal restrictions on stem cell research; will represent an efficient use of California resources by affording multiple organizations shared access to expensive technologies and space; and, will enable and facilitate multi-disciplinary, collaborative research.

SDCRM is a historic alliance that marshals the intellectual resources of four world-leaders in life sciences research each of which has impressive complementary research strengths. By building only one new facility, by sharing space and expensive technologies and resources SDCRM represents an effective and efficient use of Proposition 71 funds and creates a synergistic research enterprise the whole of which is substantially greater than the sum of its parts.

Collaboration is vital to hasten the pace of progress in science. As a result of the extraordinary growth in the body of scientific knowledge, life scientists have had to focus, to compromise breadth for depth of understanding of narrow, specific disciplines. Complex biological problems, however, raise questions that span disciplines. Development of solutions to complex problems requires that scientists collaborate. SDCRM is the only organization anywhere in the world created expressly to lower any and all barriers to inter-institutional and interdisciplinary collaboration among scientists. The SDCRM facility is intended to house biologists, chemists, technologists, bioengineers, computer scientists and clinicians in open laboratories and is designed to facilitate and encourage collaboration among them as required to translate the basic understanding of stem cell science into tools useful to diagnose and treat human disease. The facility will also serve as a hub of an extensive outreach program affording the community access to stem cell related resources and education opportunities.

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